

Perception of undergraduate physical therapy students regarding the clinical teaching attributes of their clinical instructors.

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Abstract

Clinical instructors play an important role in the clinical education of physical therapy students. A good clinical instructor ensures that the students get maximum benefit out of the clinical experience. The feedback of students about their clinical instructors is very important in designing strategies that can improve the clinical learning of students. Objective of this study was to find the perception of undergraduate physical therapy students regarding the clinical teaching attributes of their clinical instructors. This observational cross sectional study was done at departments of physical therapy of four institutes of Lahore. Study was completed in 4 months. Non-probability, purposive sampling was used to select a sample of 202 students. The Response rate was 92%. Self-administered questionnaires consisting of validated 25-point McGill Clinical Teacher Evaluation Tool (CTE) were used to find out the perception of students about their clinical teachers. The total agreement score of McGill's CTE rating was high i.e. Mean \pm SD=97.35 \pm 15.478. The attribute of clinical teacher "is interested in helping students to learn" was rated the highest (Mean \pm SD=4.41 \pm 0.786) and "Occasionally challenges points presented in texts and journals" was rated the lowest (Mean \pm SD=3.38 \pm 1.109). The undergraduate physical therapy students rated their clinical instructors higher. Clinical instructors were helping for the students however more focus should be placed on the evidence based practice and instructors should regularly incorporate evidence from literature in their teaching practices.

Keywords: Clinical clerkship, Pakistan, Perception, Physical therapists, Students.

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Introduction

Clinical instructors play a vital role in the clinical learning of undergraduate physical therapy students. It is very important for the clinical instructors to train the physical therapy students in accordance with the growing challenges. The clinical learning must prepare the students to be able to work as primary health care providers [1]. Clinical instructor must use the best possible learning strategies and learning environments in order to ensure the development of good clinical reasoning in the students. Significant mismatch has been found between the preferred and actual learning environments of paramedical students [2]. Dynamic nature of clinical education requires multiple clinical instructors who have specialized in different domains of physical therapy [3]. Three categories of clinical education organization have been discussed by Bench [3]. The bridge version of clinical education organization is in use in British common wealth countries including Nigeria, in which clinical rotations are organized in hospitals that are affiliated with respective universities of the students [4]. The same bridge version is commonly used in Pakistan in most of the physical therapy institutes. The characteristics of an ideal clinical teacher as perceived by the students have been reported

to be professionalism, being a role model for the students, describing the decision making process, considering the self-respect of students, willingly helping the students, appropriate knowledge of the respective subject and ability to demonstrate and convey that knowledge to the students [5]. The most important and most hindering behaviours of clinical instructors that students think a clinical teacher must possess have been found to be focusing on practical learning of technical skills, treating students in a friendly manner and teaching with enthusiasm. Most commonly reported teaching behaviours that limit learning are asking questions in a rude way that discourages the students, error correction of students in front of patients, not recognizing extra efforts of the students and not allocating proper time for teaching [6]. There has been no research done in Pakistan on clinical teaching and clinical education of undergraduate physical therapy students. No current research based evidence is available regarding the effectiveness of clinical teaching in Pakistan. The evaluation of clinical education and educators of undergraduate physical therapy students is very important In order to get better outcomes in clinical learning. Nigerian physical therapy students have rated their clinical instructor high on the clinical teacher evaluation tool. Nature of job of clinical instructor i.e.

as academician or as clinician, as well as his/her highest academic degrees were the important factors that influenced the ratings [4]. An improvement in clinical learning and clinical education in Pakistan can be achieved only if proper evaluation of the instructors and clinical education is done. It is very important to find out the perception of physical therapy students regarding their clinical instructors. Current study is focused specifically on the perception of undergraduate doctor of physical therapy students.

Objectives

To find the perception of undergraduate physical therapy students regarding the clinical teaching attributes of their clinical instructors.

Rationale

The evaluation of clinical education and educators of undergraduate physical therapy students is very important to improve the clinical learning experience of the students and to get better outcomes in clinical learning.

Operational Definition

Clinical teacher evaluation tool

McGill's Clinical Tutor Evaluation (CTE) instrument was used to evaluate the clinical teaching attributes of clinical tutors. This tool was originally developed to evaluate the clinical teaching attributes of physicians [7] but it has been recently validated to be used for physical therapy clinical instructors. The reliability of the tool was 0.73 [4].

McGill's CTE instrument is 25-item tool consisting of attributes of a clinical teacher. Each attribute is answered on a 5-point Likert scale from 'very strongly disagree' to 'very strongly agree'. A high total agreement score shows a better rating of that attribute. 'My clinical teacher should: "Be enthusiastic and understanding"; "Inspire confidence in my knowledge of subject"; "Emphasizes concepts rather than factual recall" are a few examples of attributes of clinical teacher.

Materials and Methods

Study design

It was an observational cross sectional study.

Setting

Data was taken from department of physical therapy Azra Naheed medical college and University of Lahore.

Duration

Study was completed in a 4 months' time period.

Sampling technique

Non-probability, purposive sampling techniques was used.

Sample size

The Sample size of 202 undergraduate physical therapy students was calculated from a population of 406 students and we used 5% level of precision. The response rate was 92% i.e. 188 students responded back.

Eligibility criteria

Inclusion criteria: Undergraduate physical therapy students who had started their clinical rotations i.e. from third professional year to 5th professional year of Doctor of physical therapy (for semester system 5th semester to 10th semester) were included in the study.

Exclusion criteria: Students whose parents were from medical profession, Students unwilling to participate and those students who were doing honorary internships apart from the supervised clinical practice provided by their institutes were excluded from the study.

Methodology

All 202 students fulfilling the inclusion criteria were taken from Azra Naheed Medical College and university of Lahore. Informed consent was taken from the students. Students were given a self-administered Questionnaire that took 20 minutes to complete and consisted of four parts i.e. part I: demographic characteristics of students, Part II: demographic characteristics of clinical instructors and Part III: the McGill Clinical teaching evaluation tool (CTE) . The 25-Point McGill CTE tool has been validated for the evaluation of physical therapy clinical instructors. Part IV. The anonymity of the researcher was ensured during data collection to reduce the chances of bias.

Ethical consideration

The study was conducted after the approval from ethical review committee and institutional review boards of the institutes. Data was collected after taking signed consent from the respondents.

Statistical analysis

All collected data was organized and analysed by computer program SPSS version 20. Mean and standard deviation were calculated for quantitative variables while frequency and percentage (%) were used for qualitative variables. Total agreement score of McGill's CTE tool was calculated and mean and Standard deviation for agreement on individual attributes in CTE tool were also calculated.

Results

Out of 188 respondents the majority of the students were females (62.77%, n=118). Most of the students (69.68%, n=131) were in 1st year of clinical rotations i.e. 3rd professional

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year of DPT. Most of the students (86.70%, n=163) were taught by male clinical instructors at the time of survey. Most of the students (77.13%, n=145) were taught by teachers who were working as both clinicians and academicians. A wide majority of students (56.38%, n=106) were taught by clinical instructors who had highest degree of M-Phil. A small percentage of students i.e. 10.64% (n=20) did not know the highest degree of their clinical instructor.

Table 1. Order of agreement of student ratings of the attributes of effective clinical teachers using the McGill CTE rating instrument.

	Mean ± SD
Is interested in helping students to learn	4.41 ± 0.786
Deals with colleagues and staff members in a friendly manner	4.29 ± 0.797
Dependability of attendance is good	4.13 ± 0.811
Encourages students to ask questions	4.08 ± 0.981
Encourages students to think	4.07 ± 0.967
Is usually readily available for discussion	4.05 ± 0.932
Encourages students to take responsibility for their own learning	4.05 ± 0.988
Conveys enjoyment of associating with and his/her colleagues	4.03 ± 0.904
Is clear and understandable in his/her explanations	4.02 ± 0.925
Provides opportunities for discussion with students	4.01 ± 1.029
Is usually well prepared for teaching sessions	3.97 ± 1.047
Inspires confidence in his/her knowledge of subject	3.95 ± 0.921
Is enthusiastic and understanding	3.94 ± 0.920
Emphasizes concepts rather than factual recall	3.83 ± 0.944
Attitude to patients fits my concept of professional	3.80 ± 1.009
Teaching is suited to the level of students' sophistication	3.78 ± 0.994
Displays good judgment in decision making	3.77 ± 0.957
Provides feedback and directions to the students	3.77 ± 1.113
Emphasizes clinical skills, not lab tests for patient management	3.73 ± 0.962
Invites comments rather than providing all answers	3.70 ± 1.084
Is interested in social and psychological aspects of illness	3.70 ± 0.997
Poses problems for students to solve	3.65 ± 0.972
Emphasizes problem solving approach rather than solution per se	3.65 ± 0.910
Presents divergent view point for contrasts and comparison	3.60 ± 0.940
Occasionally challenges points presented in texts and journals	3.38 ± 1.109
Mean total agreement score of McGill's CTE rating	97.35 ± 15.478

Most of the students (73.94%, n=139) were taught by teachers with specialty in musculoskeletal physical therapy. Only 1.6% (n=3) were taught by instructors with specialty in paediatric

physical therapy. 18.09% (n=34) students were taught by instructors with no specialty (Table 1).

Discussion

The progression and development of the field of physical therapy depends on the quality of academic and clinical education provided to the physical therapy students. Clinical education is very important in preparing the students for the practical field. This study is the first step towards the assessment of an important aspect of clinical education in Pakistan. Analysing the effectiveness of the strategies used by the clinical instructors is a key element of clinical education which has been studied in current study. The results of our study have shown that more than half of the students were satisfied with their clinical experience and the clinical teaching attributes of their clinical instructors. The students rated their teachers high on the McGill's CTE rating instrument and the students found the clinical experience challenging. The students graded "a good setting for clinical rotations" as the most important factor in clinical learning highlighting the importance of organizational and patient related factors in the clinical education of physical therapy students. The low rating for the attribute "Occasionally challenges points presented in texts and journals" shows that research based evidence is not used adequately by the clinical instructors during clinical teaching necessitating the requirement of further exploration of this aspect of teaching. Furthermore the low rating for "Emphasizes problem solving approach rather than solution per se" shows that clinical instructor did not focus much on the development of problem solving approach in the students. Various factors are important in the clinical education of the undergraduate physical therapy students and a good clinical instructor can be regarded as the integral part of effective clinical learning. Various studies have been conducted to find out the perception of students regarding their clinical instructors in order to improve the process of clinical education and to maximize the benefits students get from the clinical learning [8,9]. McGill's CTE rating instrument has been used to assess the perception of Nigerian physical therapy students regarding various teaching attributes of their clinical instructors. The students rated their teachers higher on the CTE rating. However differences did exist between the ratings of different institutes [4]. The present study has also shown high rating on the McGill's CTE tool however the rating is less than that of the Nigerian physical therapy students. The present study did not evaluate the individual differences of CTE rating among various institutes due to confidentiality issues. The same study on Nigerian physical therapy students has shown that the vast majority of students were taught by clinical instructors who worked solely as clinicians, with highest degree of masters and specialty in orthopaedics [4]. The present study has shown somewhat similar results with most of the students being taught by clinical instructors working as clinicians and academicians, the highest degree of the teacher being M-Phil and specialty in musculoskeletal physical therapy.

Present study was conducted on undergraduate physical therapy students of Doctor of physical therapy program, to ensure uniformity of credit hours and clinical hours. However the study on Nigerian physical therapy students was conducted on students from various undergraduate and postgraduate physical therapy programs. A study conducted on medical students used a modified job satisfaction questionnaire. The results of that study have shown differences between the satisfaction level of students with the academic education and clinical education. Students were more satisfied with the academic learning [10]. Although the results are not comparable but it can be highlighted as an important issue for further research. In the present study majority of the students reported that they were satisfied with their clinical learning. However, comparison of satisfaction level between academic and clinical learning was not done. A previous study on the perception of physical therapy students of Master's degree program has shown that the clinical instructors, who involve the students more in patient care, provide them challenging environment for learning and present a professional behaviour were valued more [11]. This can be related to the high ratings on the attributes, "Is interested in helping students to learn", "Encourages students to think" and "Is usually readily available for discussion" in the present study. The results of this study are based on the perception of students and this could be a limitation. The respondents might have given responses that they thought would be more appreciable by the researcher.

In the present study, the high ratings on the individual attributes of clinical teaching and satisfaction of most of the students with clinical learning shows that students rate their teachers higher based on their clinical teaching attributes and there satisfaction level might have nothing to do with the gender, qualification or the designation of the teacher. This highlights the importance of professional and clinical teaching attributes of the clinical instructor.

Conclusion

Clinical instructors were helping for the students however more focus should be placed on the evidence based practice and instructors should regularly incorporate evidence from literature in their teaching practices.

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